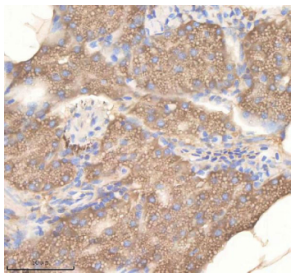
Zebrafish Pdcd10 Antibody / Pdcd10a / Pdcd10b / Programmed cell death protein 10 (RZ1266)

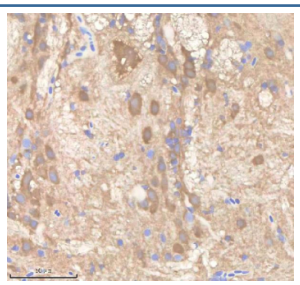
Catalog No.	Formulation	Size
RZ1266	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

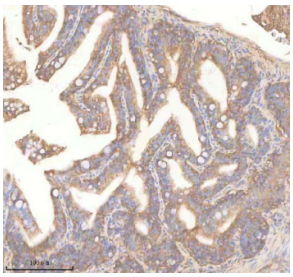
Availability	2-3 weeks
Species Reactivity	Zebrafish
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity chromatography
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q6PHH3, Q6NWL1
Localization	Cytoplasm, cell membrane
Applications	Immunohistochemistry (FFPE) : 2-5ug/ml
Limitations	This Zebrafish Pdcd10 antibody is available for research use only.



IHC staining of zebrafish Pdcd10a/b protein using Zebrafish Pdcd10 antibody, HRP-labeled secondary and DAB substrate. Pdcd10 was detected in a paraffin-embedded section of zebrafish pancreas tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of zebrafish Pdcd10a/b protein using Zebrafish Pdcd10 antibody, HRP-labeled secondary and DAB substrate. Pdcd10 was detected in a paraffin-embedded section of zebrafish brain tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of zebrafish Pdcd10 protein using Zebrafish Pdcd10 antibody, HRP-labeled secondary and DAB substrate. Pdcd10a/b was detected in a paraffin-embedded section of zebrafish colon tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

Description

Pdcd10 (Programmed Cell Death 10) is a protein involved in regulating cell survival, apoptosis, and angiogenesis. It is a member of the CCM (Cerebral Cavernous Malformation) family of proteins, which are associated with vascular development and the formation of blood vessels. Pdcd10 plays a crucial role in maintaining vascular integrity and endothelial cell function during angiogenesis, particularly in response to vascular stress and hypoxia.

In zebrafish, Pdcd10 is an ortholog of the human PDCD10 gene. Both zebrafish and human Pdcd10 share high sequence similarity and functional conservation, especially in regulating endothelial cell behavior and vascular development. The zebrafish model is particularly useful for studying the role of Pdcd10 in vascular biology, developmental angiogenesis, and its involvement in vascular diseases.

Pdcd10 is involved in the regulation of endothelial cell junctions and vascular permeability. It plays a significant role in vascular remodeling during embryogenesis and in the maintenance of blood-brain barrier integrity. By regulating cell-cell adhesion and controlling the actin cytoskeleton, Pdcd10 ensures proper endothelial cell alignment and the formation of functional blood vessels. It is also involved in cell survival pathways, particularly in protecting endothelial cells from stress-induced apoptosis.

In zebrafish, Pdcd10 is expressed in tissues undergoing active vascularization, such as the brain, heart, and fin. It is particularly important in the developing blood vessels, where it regulates the formation of vascular networks and ensures the proper development of the circulatory system. Pdcd10 is essential for maintaining the balance between angiogenesis and vascular stability during both development and tissue regeneration.

Given its critical role in vascular development, angiogenesis, and endothelial cell survival, zebrafish Pdcd10 is an important model for studying vascular diseases, including cerebral cavernous malformations, stroke, and tumor angiogenesis. Its involvement in vascular integrity and cell survival also makes it a relevant target for research into cardiovascular diseases and vascular dysfunction.

Application Notes

Optimal dilution of the Zebrafish Pdcd10 antibody should be determined by the researcher.

Immunogen

E. coli-derived zebrafish Pdcd10 recombinant protein (amino acids M1-A210) was used as the immunogen for the Zebrafish Pdcd10 antibody.

Storage

After reconstitution, the Zebrafish Pdcd10 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.